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February 15, 1995

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W. - Room 222  
Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL

Re: WT Docket No. 94-148; Reorganization and Revision  
of Parts 1, 2, 21 and 94 of the Rules To Establish a New  
Part 101 Governing Terrestrial Microwave Fixed Radio  
Services

Dear Mr. Caton:

In the above-referenced Notice of Proposed Rule Making ("NPRM"), the Commission proposes to simplify the rules for Part 21 and Part 94 fixed microwave services and to consolidate those rules into a new Part 101 so they are "user friendly."<sup>1</sup> Pursuant to Section 1.415 of the Commission's Rules,<sup>2</sup> Harris Corporation-Farion Division (Harris),<sup>3</sup> hereby comments on the NPRM.

Part 21 and Part 94 have been with us for many years. Each have been modified and updated a number of times. Combining them under a new Part 101 has to be considered as a

<sup>1</sup>NPRM at paras. 1 and 21.

<sup>2</sup>47 C.F.R. Section 1.415 (1989).

<sup>3</sup>Harris is a Florida corporation with its headquarters located in Melbourne, Florida. Through its Farion Division, located in San Carlos, California, Harris designs, develops, and manufacturers microwave and multiplex systems used by licensees in the terrestrial fixed microwave service. Harris is one of the largest suppliers of microwave equipments in the global market. As a leading manufacturer of equipment used in the terrestrial fixed services, Harris is interested in advancing the state-of-the-art in microwave technology and to maximize the use of frequency bands made available for the microwave services.

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major FCC undertaking for 1994 and 1995. Recognizing the long lasting impact this work will have on industry, Harris has dedicated important human resources to the study of Part 21 and 94 merging.

The Fixed Point-to-Point Communications Section, Network Equipment Division of the Telecommunications Industry Association ("TIA"), and the National Spectrum Managers Association, Inc. ("NSMA"), are filing joint comments on the NPRM. In these comprehensive comments, TIA and NSMA set forth their general support for the Commission's proposals.

Harris has been involved since 1993 in several TIA and NSMA committees in developing these proposals. Harris, therefore, enthusiastically supports these proposals and urges their prompt adoption.

TIA and NSMA also have included a request in their comments that the Commission adopt certain other changes to the proposed Part 101 which would ensure that private operational fixed point-to-point ("POFS") and common carrier fixed point-to-point ("CC") microwave licensees could continue serving the public interest. These are discussed in more detail below.

Specifically, TIA and NSMA propose that the Commission, as part of the NPRM, revise the rules so that: (i) on all technical rules, private and common carrier fixed point-to-point microwave users are treated the same; (ii) user-related rules, such as frequency coordination, interference protection, transition to a new Part 101, and construction, promote spectral efficiency and interference protection; and (iii) equipment-related rules, such as antenna standards and ATPC, reflect industry standards:

- Equal treatment for private and common carriers -- All technical rules and frequency assignments applicable to Part 21 and Part 94 fixed point-to-point microwave applicants and licensees must be consolidated into the proposed Part 101, Subpart C (Technical Standards). To preserve the unique identity of POFS and CC licensees, non-technical rules applicable to these separate services, such as eligibility and permissible communications, must remain in Subpart H (Private Operational Fixed Microwave Service) and Subpart I (Point-to-Point Microwave Radio Service). POFS and CC licensees must be subject to the same requirements for application filing (e.g., applications forms and content), authorization (e.g., private carriers would be eligible for temporary authorizations in the same manner as common carrier), and construction (e.g., common carriers could construct before licensing in the same manner as private carriers). Definitions must be adopted for the "Private Operational Fixed Point-to-Point Microwave Service" and for the "Common Carrier Fixed Point-to-Point Microwave Service."
- User related issues -- A transition period for the Part 101 rules must be established to facilitate deployment of the substantive new equipment and interference standards that

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will be applied. Criteria for classifying "major application amendments and license modifications must be revised to be more industry-appropriate. To safeguard against weather delays or the delays caused by anticipated equipment, site and construction crew shortages, all POFS and CC microwave licensees must be given 18 months to construct. Frequency coordination rules must be made expressly applicable to private and common carrier applicants and licensees. Interference dispute resolution procedures must be established. Interference criteria may be relaxed upon mutual consent of the parties. The "practical threshold" for interference protection must be defined and should be consistent with TIA Bulletin 10-F standards. Frequency tolerance specifications for the 4, lower 6, and 11 GHz bands and for heterodyne equipment must be added. Modulation specifications must be made applicable to analog systems and must be expanded to cover equipment operating below 19.7 GHz. Loading standards must be limited to digital services and to commercially available equipments.

- Equipment issues -- Antenna standards must be clarified so that they apply to all fixed stations operating above 900 MHz and so that antenna upgrades can be requested and paid for by the appropriate party. Antenna polarization must be defined. Use of Automatic Transmitter Power Control ("ATPC") must be permitted under the new rules for both POFS and CC licensees (ATPC is the most forward step in reducing interference potential and there is a general consensus in the industry on its application).

Adoption of a uniform set of rules for private and common carrier fixed point-to-point microwave licensees and applicants is timely and critical. These private and common carriers increasingly share many frequency bands, including the five (5) bands above 3 GHz recently reallocated to accommodate users which must relocate to clear spectrum for emerging technologies, including PCS.

The Part 101 technical rules must be in place before PCS licenses are granted and before the 2 GHz users commence relocation. These rules are needed to guide how the former 2 GHz fixed licensees will operate in the new bands. If such rules are not in place, implementation of PCS could be delayed significantly due to a backlog of 2 GHz relocation applications, waiver requests by such applicants, and uncertainty over which rules apply.

In the Second Report and Order for ET Docket No. 92-9, when the Commission reallocated the bands above 3 GHz, it expressly postponed consideration of various permanent technical rules for Part 21 and Part 94 licensees.<sup>4</sup> The importance of adopting the technical

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<sup>4</sup>Redevelopment of Spectrum to Encourage Innovation In the Use of New Telecommunications Technologies, Second Report and Order, ET Docket No. 92-9, 8 FCC Rcd 6495, 6519-20 (1993) ("Second Report and Order"), modified, Memorandum Opinion and

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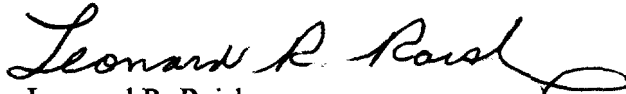
recommendations made in the TIA/NSMA joint comments cannot be overemphasized. These rules should have been adopted in the Second Report and Order, but the Commission decided to wait until initiating the rulemaking for consolidating Parts 21 and 94. The entire fixed point-to-point microwave industry has relied on the Commission's promise to consider the technical proposals deferred from ET Docket No. 92-9 and has waited over 18 months for this opportunity to re-submit them.

With minor exceptions, the TIA/NSMA proposals repeat the ET Docket No. 92-9 proposals and thus must be considered fully and adopted in this proceeding. Any further delay only would jeopardize the public interest by disrupting deployment of PCS, relocation of 2 GHz fixed microwave users, and continued availability of all fixed point-to-point microwave radio service. Harris, therefore, urges the Commission to proceed to Rulemaking taking the TIA/NSMA and above comments into account.

Should there be any questions concerning these comments, please contact the undersigned.

Respectfully submitted,

HARRIS CORPORATION - FARINON DIVISION

  
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Its Attorney

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Date: February 15, 1995